REMARKS/ARGUMENTS

In the Specification:

In the specification, paragraph **[0011]** has been amended to reflect the addition of new drawing Figure 6. New paragraph **[0031.1]** has been added only to explain the subject matter shown in Figure 6. No new material has been added.

In the Drawing Figures:

In new Figure 6, a single force exerting device is shown to be used to move more than one mold core.

In the Claims:

Claims 1-6, 8-19, 21-27 and 29 remain pending in the present application. Claims 7, 20, and 28 have been canceled. New claim 29 has been added.

Objection to Claim 3 Under 35 U.S.C. § 112

The Examiner objected to claim 3 under 35 U.S.C. § 112 for reciting "*a* single force exerting device ..." as opposed to "*the* single force exerting device ..." (emphasis added). However, Applicant respectfully submits that use of the word "a" is correct in this claim. Claim 3 depends from claim 1, which recites "at least one force exerting device ..." Therefore, claim 3 would appear to lack a proper antecedent basis if the word "a" were changed to "the." Also, Applicant is attempting to clarify in claim 3 that only a single force exerting device is used to move more than one moveable core. Thus, claim 3 is more limiting than claim 1, wherein one or more force exerting devices

could theoretically be employed for this purpose. As such, Applicant respectfully submits that the Examiner's § 112 objection may be properly withdrawn.

Rejection of Claims 1, 2, and 4-28 Under 35 U.S.C. § 103(a)

The Examiner rejected claims 1, 2, and 4-28 Under 35 U.S.C. § 103(a) as being unpatentable over disclosure occurring at pages 1-4 of the present application, which the Examiner refers to as AAPA, in view of Richardson (US 5,843,494). As Applicant does not believe AAPA in view of Richardson to teach or suggest the subject matter of claims 1, 2, and 4-28, the rejection is respectfully traversed.

The section of the present specification that the Examiner designates AAPA discusses known, manual processes for spotting a moveable mold core to a mold. For example, it is known that large mold cores are commonly moved by crane or hoist, and may be manually moved into and out of contact with a mold during the spotting operation by means of pry bars or slide-hammers, for example. Mold core spotting is typically done on a work bench or other similar structure that is both large enough to receive the mold and core(s), and strong enough to support their weight.

Richardson teaches only a specialized actuator that is designed to allow for the engagement and displacement of a mold core while it is installed to a die casting mold. The actuator employs an extendable hydraulic cylinder in combination with a rotary actuator to provide the desired interlocking and displacement of the mold core. However, Richardson does not teach or discuss mold/die spotting in general and, certainly, does not teach or suggest that the actuator can be used to spot a moveable

mold core to a mold. Rather, the actuator of Richardson is applicable only to an assembled mold and mold core and, even then, to a very specific application.

Applicant is not claiming the use of a force exerting device for moving a mold core. Certainly, there are a variety of known force exerting devices that can be used to operate (move) such a mold core during the molding operation (i.e., when the mold core is actually assembled to the mold). The use of moveable mold cores with molds is not new, nor is the use of actuators therefor. Rather, Applicant's invention is directed to an apparatus and method that allows the moveable mold cores of a *variety* of different molds to be *spotted*. The molds may be of different size and shape, and may have dissimilar mold cores. Even so, the apparatus and method of the present invention allows each of the molds/mold cores, or at least a reasonable number thereof, to be spotted using the same primary apparatus and method. AAPA in view of Richardson does not teach or suggest such an apparatus or method.

The apparatus and method of the present invention provides a surface for receiving and securing a mold and mold core(s) and for allowing the mold core(s) to be moved into and out of contact with a mating portion of the mold. The apparatus and method of the present invention employs one or more force exerting devices for moving the mold core(s). The force exerting device(s) may be provided with various connection means in order to properly connect the force exerting device(s) to the mold core(s). The apparatus of the present invention is also preferably designed to allow proper location/orientation of the force exerting device(s) with the mold core(s), and for subsequent movement of the mold core(s) therewith. Preferably, the location/orientation of the force exerting device(s) is adjustable in three dimensions.

This is an important feature of the present invention in situations wherein a number of molds of different size, shape, or configuration are to be accommodated by a single apparatus. Otherwise, it may be necessary to have a separate apparatus for each mold to be spotted.

Richardson does not teach or suggest such an apparatus or method. While it may be possible that the actuator taught by Richardson could be employed as a force exerting device by the present invention, Richardson in no way teaches or suggests that the device can be used in such a manner. Nor does Richardson teach or suggest the presence or use of other components necessary to perform mold/die spotting. Rather, the actuator of Richardson is limited to use in an assembled mold of specific configuration. As such, it can be understood that there are material differences between the teachings of AAPA in combination with Richardson and the present invention. Consequently, Applicant respectfully submits that AAPA in view of Richardson cannot support a rejection of claims 1, 2, and 4-28 Under 35 U.S.C. § 103(a).

Rejection of Claim 3 Under 35 U.S.C. § 103(a)

The Examiner rejected claim 3 Under 35 U.S.C. § 103(a) as being unpatentable over AAPA (as described above) in view of Richardson, and further in view of Gardner, Jr. (US 4,825,656). Applicant has amended independent claim 1 to more clearly describe the subject matter recited therein. As Applicant believes amended claim 1 to recite allowable subject matter, claim 3, which depends therefrom, would also be allowable.

CONCLUSION

Applicant has amended claims 1 and 17, has canceled claims 7, 20 and 28, and has added new claim 29. Applicant has also distinguished the subject matter of the present invention over the teachings of the references cited as prior art by the Examiner.

Therefore, Applicant respectfully submits that the present application is now in condition for allowance, and entry of the present amendment and allowance of the application as amended is earnestly requested. Telephone inquiry to the undersigned in order to clarify or otherwise expedite prosecution of the present application is respectfully encouraged.

Respectfully submitted,

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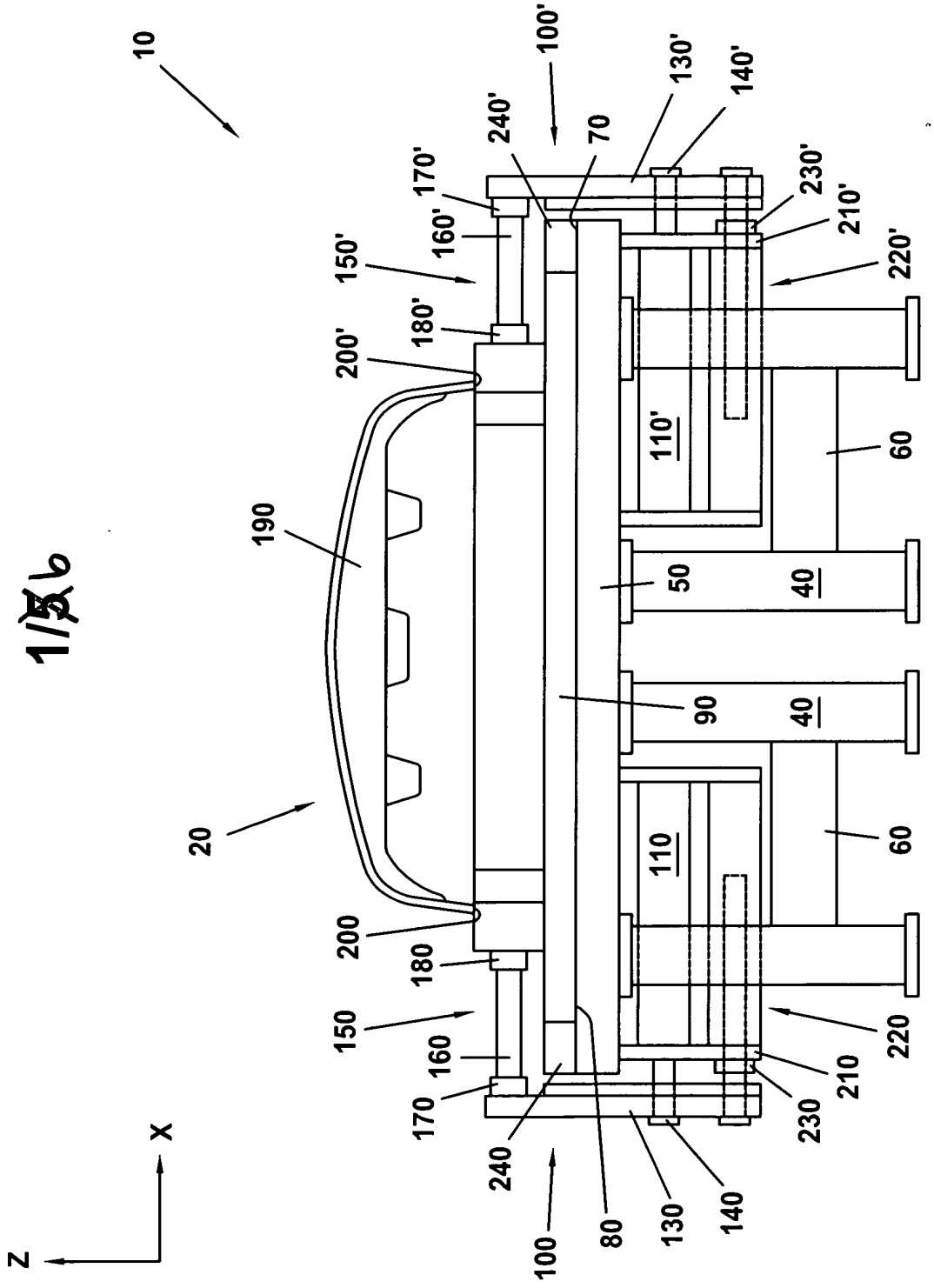

FIG. 1

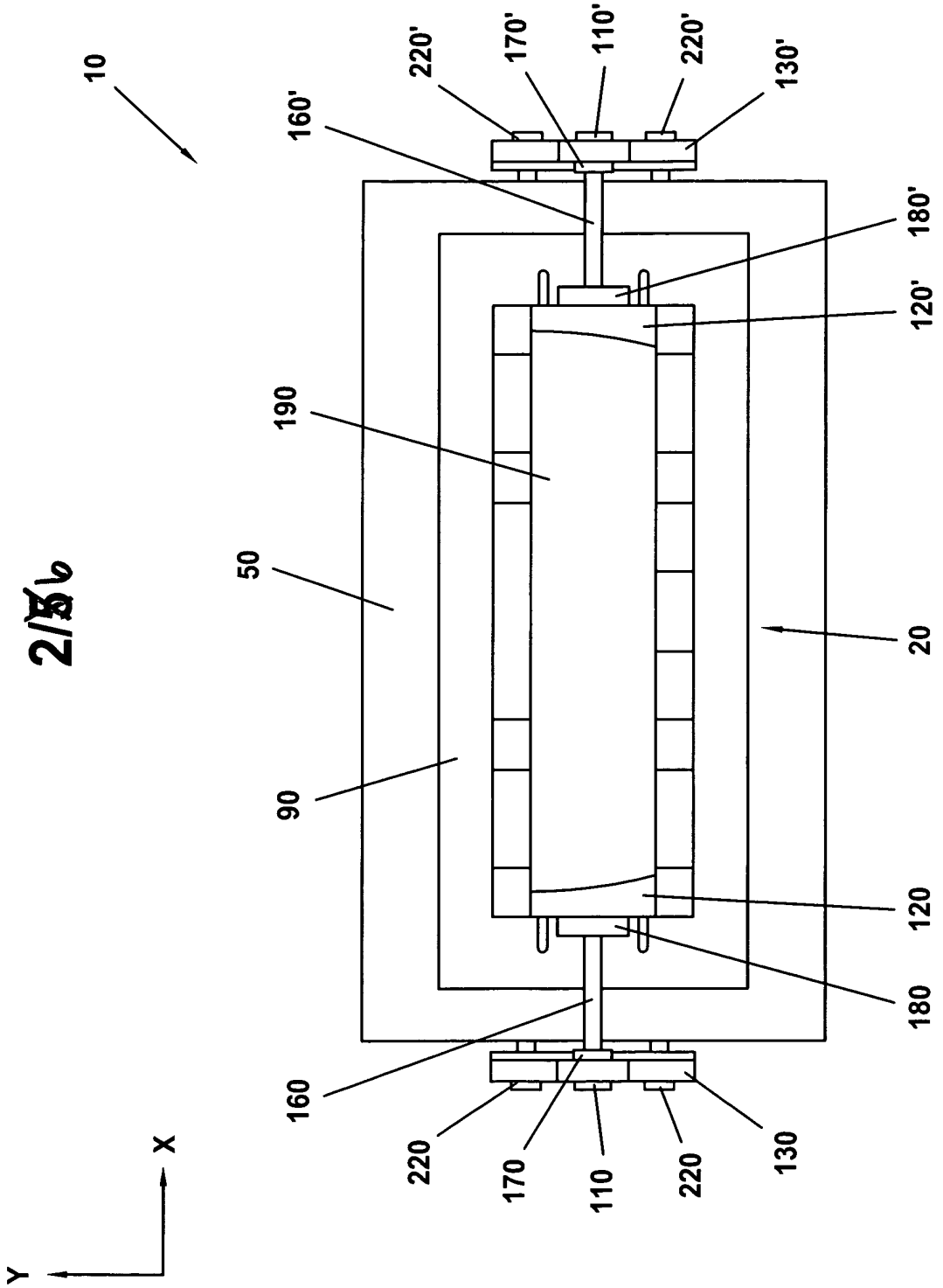

FIG. 2

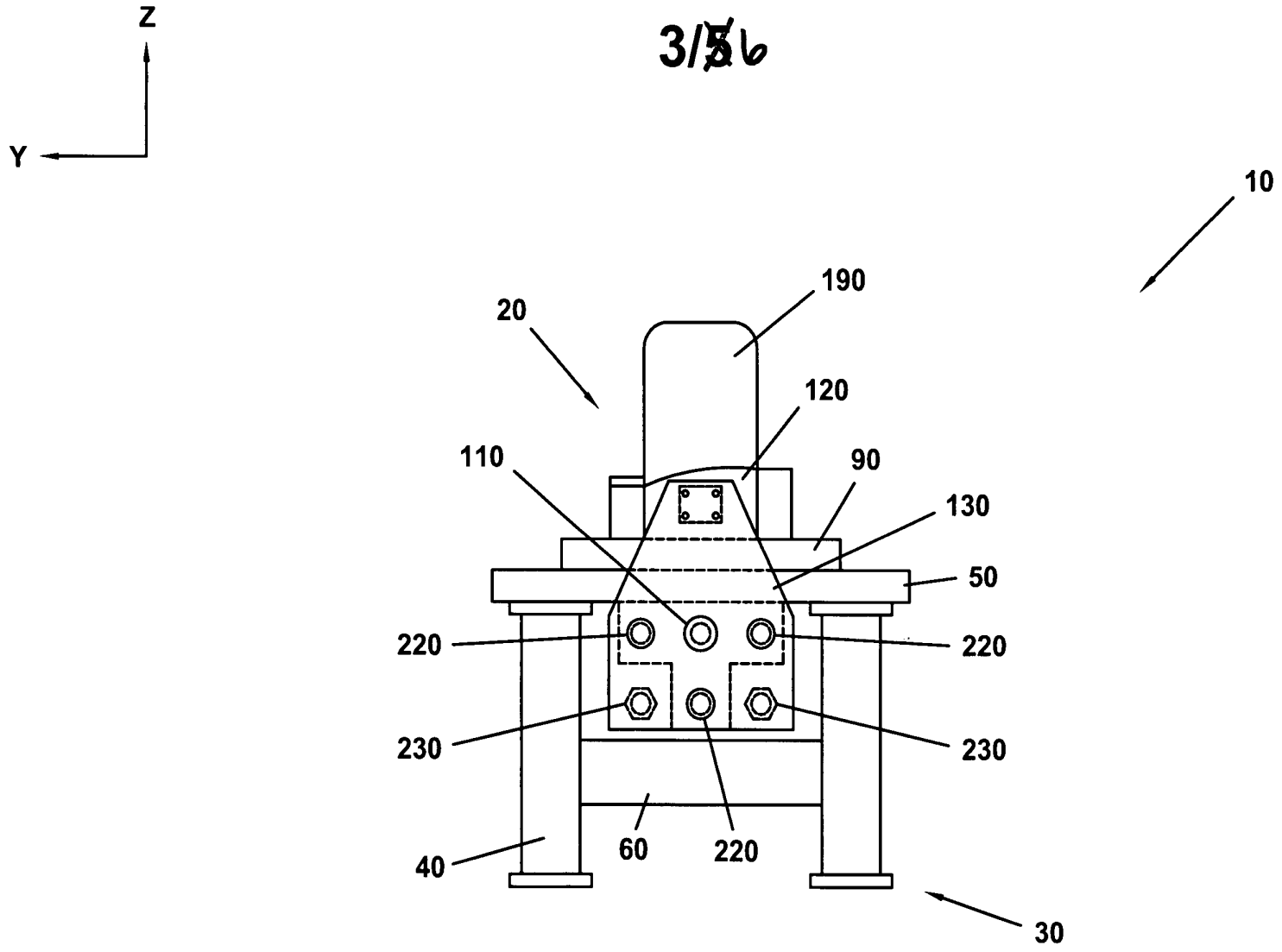

FIG. 3

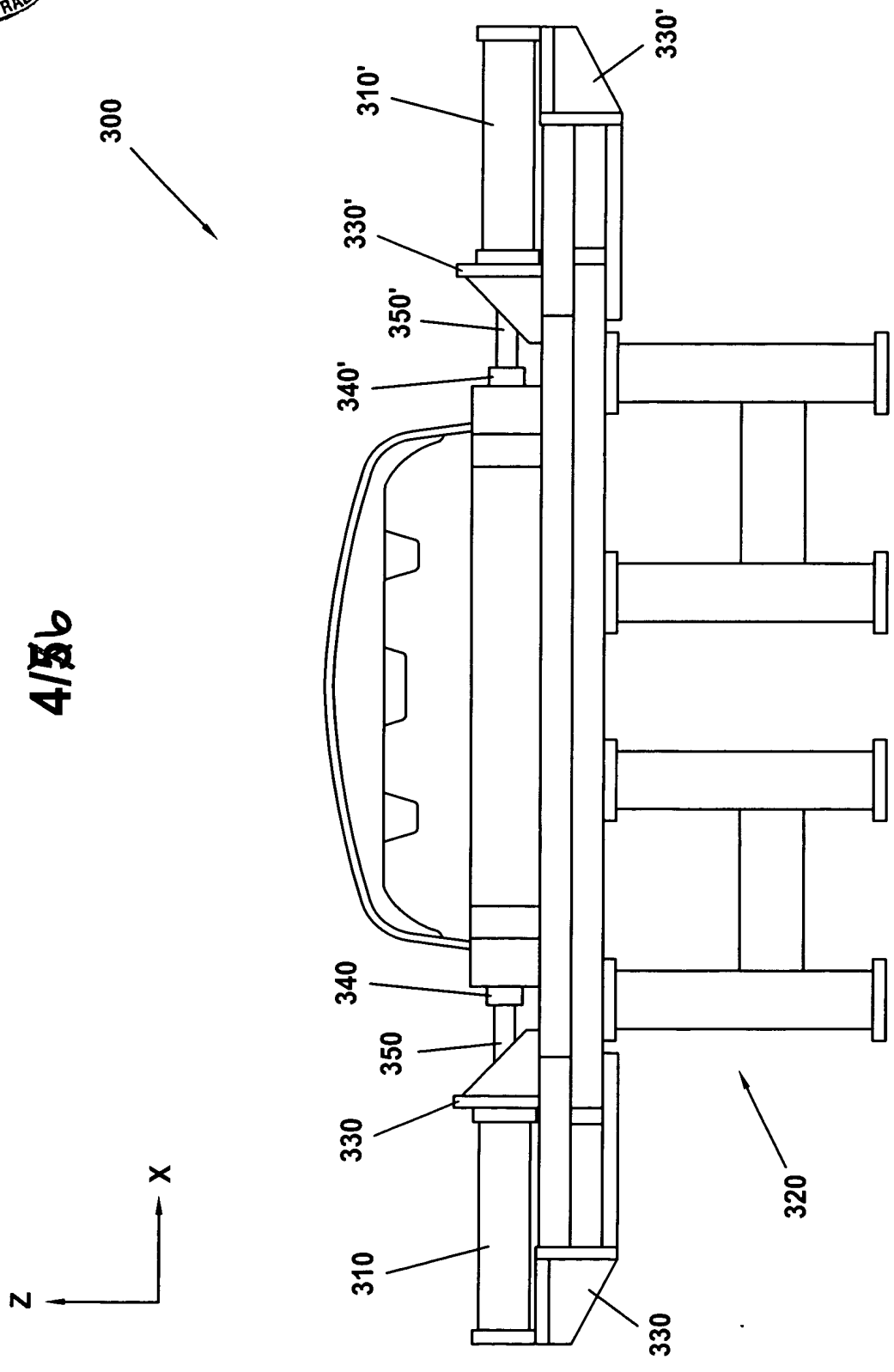

FIG. 4

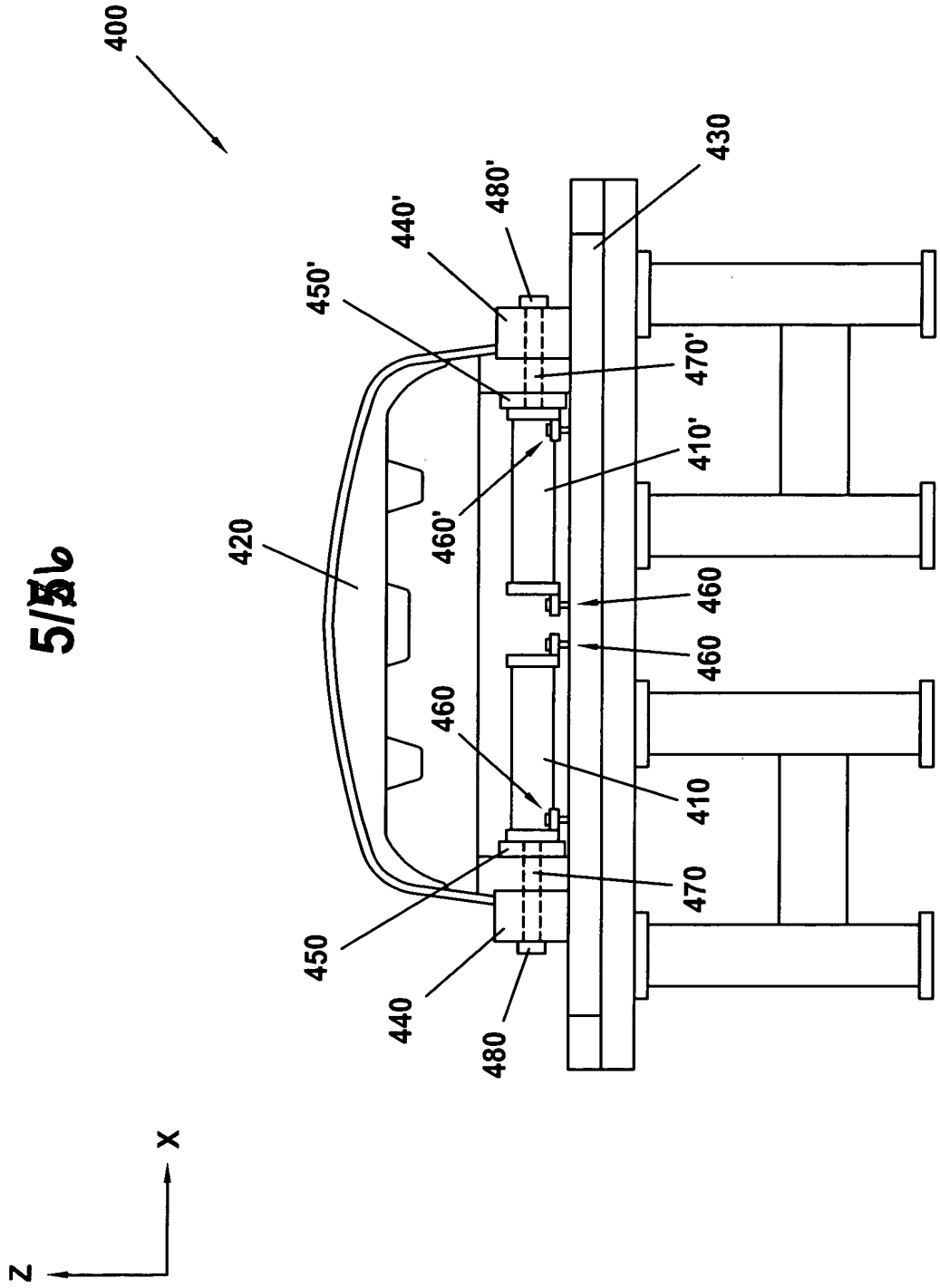

FIG. 5